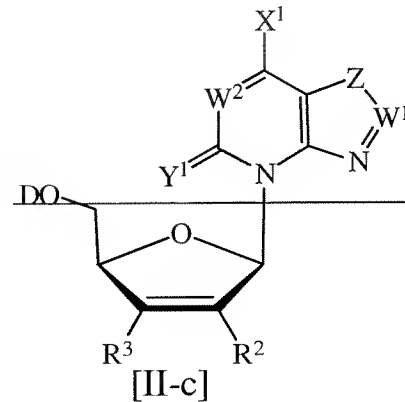
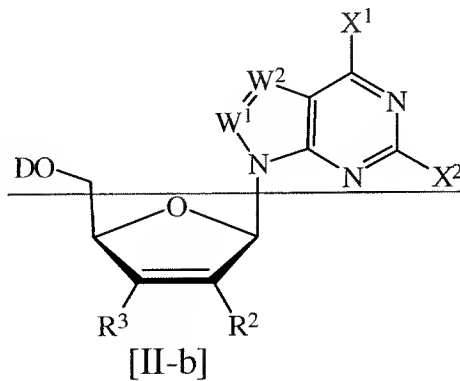
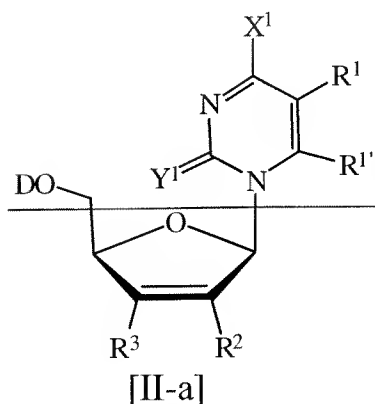
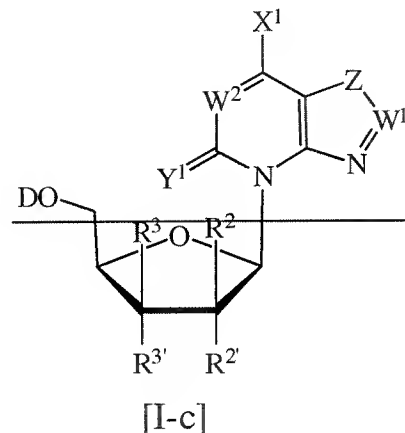
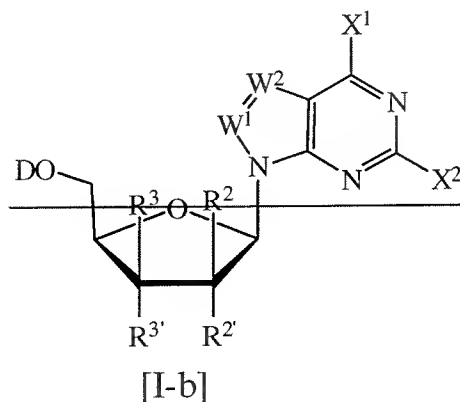
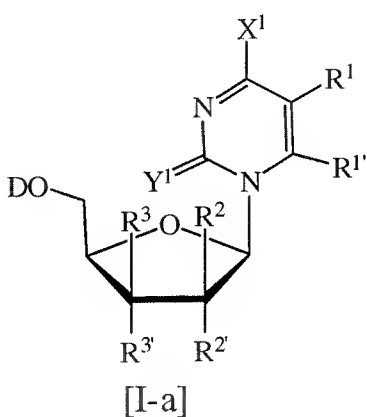


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended): A method for the treatment of a host having a *Orthomyxoviridae* or *Paramyxoviridae* viral infection or abnormal cellular proliferation comprising administering to a host in need thereof an effective amount of a compound of formula [I-a], [I-b], [I-c], [II-a], [II-b], or [II-c]:



or its  $\beta$ -L enantiomer or a pharmaceutically acceptable salt thereof, wherein:

each D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid;

~~each  $W^1$  and  $W^2$  is independently CH or N;~~

[[each]]  $X^1$  and  $X^2$  is independently hydrogen, F, Cl, Br, I,  $NH_2$ ,  $NHR^4$ ,  $NR^4R^{4'}$ ,  $NHOR^4$ ,  $NR^4NR^{4'}R^{4''}$ , OH,  $OR^4$ , SH or  $SR^4$ ;

[[each]]  $Y^1$  is O, S or Se;

~~each Z is  $CH_2$  or NH;~~

each  $R^1$  and  $R^{1'}$  is independently hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, alkylaryl, F, Cl, Br, I,  $NH_2$ ,  $NHR^5$ ,  $NR^5R^{5'}$ ,  $NHOR^5$ ,  $NR^5NHR^{5'}$ ,  $NR^5NR^{5'}R^{5''}$ , OH,  $OR^5$ , SH,  $SR^5$ ,  $NO_2$ , NO,  $CH_2OH$ ,  $CH_2OR^5$ ,  $CO_2H$ ,  $CO_2R^5$ ,  $CONH_2$ ,  $CONHR^5$ ,  $CONR^5R^{5'}$  or CN;

each  $R^2$  and  $R^{2'}$  independently is hydrogen, F, Cl, Br, I, OH, SH,  $OCH_3$ ,  $SCH_3$ ,  $NH_2$ ,  $NHCH_3$ ,  $CH=CH_2$ , CN,  $CH_2NH_2$ ,  $CH_2OH$  or  $CO_2H$ ;

each  $R^3$  and  $R^{3'}$  independently is hydrogen, F, Cl, Br, I, OH, SH,  $OCH_3$ ,  $SCH_3$ ,  $NH_2$ ,  $NHCH_3$ ,  $CH_3$ ,  $C_2H_5$ ,  $CH=CH_2$ , CN,  $CH_2NH_2$ ,  $CH_2OH$  or  $CO_2H$ ; and

each  $R^4$ ,  $R^{4'}$ ,  $R^{4''}$ ,  $R^5$ ,  $R^{5'}$  and  $R^{5''}$  independently is hydrogen, lower alkyl, lower alkenyl, aryl or arylalkyl;

such that ~~for the nucleoside of formula [I-a], [I-b] or [I-c]~~ at least one of  $R^2$  and  $R^{2'}$  is hydrogen and at least one of  $R^3$  and  $R^{3'}$  is hydrogen;

provided that when the host has a *Orthomyxoviridae* or *Paramyxoviridae* viral infection,  $R^{2'}$  and  $R^{3'}$  are not simultaneously OH;

provided that for the nucleoside of formula [I-a], when D, R<sup>3</sup>, R<sup>2</sup> and R<sup>1'</sup> are hydrogen, R<sup>3'</sup> and R<sup>2'</sup> are OH, Y<sup>1</sup> is O, and X<sup>1</sup> is NH<sub>2</sub>, then R<sup>1</sup> is not F for the treatment of a host having abnormal cellular proliferation;

provided that for the nucleoside of formula [I-a], when D, R<sup>3</sup>, R<sup>3'</sup>, R<sup>2</sup>, R<sup>1</sup> and R<sup>1'</sup> are hydrogen, Y<sup>1</sup> is O, and X<sup>1</sup> is NH<sub>2</sub>, then R<sup>2'</sup> is not OH for the treatment of a host having abnormal cellular proliferation;

provided that for the nucleoside of formula [I-a], when D, R<sup>3</sup>, R<sup>2</sup>, R<sup>2'</sup>, and R<sup>1'</sup> are hydrogen, R<sup>1</sup> is hydrogen or methyl, Y<sup>1</sup> is O, and X<sup>1</sup> is NH<sub>2</sub>, then R<sup>3'</sup> is not OH for the treatment of a host having abnormal cellular proliferation;

provided that for a nucleoside of formula [I-a], when D, R<sup>3</sup>, R<sup>2</sup> and R<sup>1'</sup> are hydrogen, R<sup>3'</sup> and R<sup>2'</sup> are OH, Y<sup>1</sup> is O, and X<sup>1</sup> is OH, then R<sup>1</sup> is not OH for the treatment of a host having abnormal cellular proliferation;

provided that for a nucleoside of formula [I-a], when Y<sup>1</sup> is O, X<sup>1</sup> is NH<sub>2</sub> or NHOH, and D, R<sup>1</sup>, and R<sup>1'</sup> are hydrogen, R<sup>2'</sup> and R<sup>3'</sup> are not simultaneously OH;

provided that for a nucleoside of formula [I-a], when Y<sup>1</sup> is O, X<sup>1</sup> is NH<sub>2</sub>, D is hydrogen or acyl, R<sup>2</sup> is OH, R<sup>1</sup> and R<sup>1'</sup> are hydrogen, R<sup>3</sup> and R<sup>3'</sup> are not simultaneously hydrogen;

provided that for a nucleoside of formula [I-a], when Y<sup>1</sup> is O, D and R<sup>1'</sup> are hydrogen, R<sup>3'</sup> and R<sup>2</sup> are simultaneously OH, and R<sup>1</sup> is hydrogen or F, X<sup>1</sup> is not NH<sub>2</sub>, NHNH<sub>2</sub>, NHCH<sub>3</sub>, or NHOH;

provided that for a nucleoside of formula [I-a], when Y<sup>1</sup> is O, X<sup>1</sup> is NHOH, R<sup>3'</sup> is OH, R<sup>1</sup> is hydrogen, methyl, or F, and D and R<sup>1'</sup> are hydrogen, R<sup>2</sup> and R<sup>2'</sup> are not simultaneously hydrogen; and

provided that for a nucleoside of formula [I-a], when Y<sup>1</sup> is O, X<sup>1</sup> is OH, R<sup>3</sup> is OH, R<sup>1</sup> is F, and D and R<sup>1'</sup> are hydrogen, R<sup>2</sup> and R<sup>2'</sup> are not simultaneously hydrogen.

2. (Currently amended): The method of claim 1, wherein the β-D nucleoside of formula (I-a) has variables X<sup>1</sup>, Y<sup>1</sup>, R<sup>1</sup>, R<sup>1'</sup>, R<sup>2</sup>, R<sup>2'</sup>, R<sup>3</sup>, and R<sup>3'</sup> [[is]] selected from one of the following rows:

X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
NH <sub>2</sub>	O	H	H	OH	H	H	OH
NH <sub>2</sub>	O	H	H	OH	H	H	I
NH <sub>2</sub>	O	H	H	OH	H	H	Cl
NH <sub>2</sub>	O	H	H	OH	H	H	Br
NH <sub>2</sub>	O	H	H	H	Cl	H	OH
NH <sub>2</sub>	O	H	H	H	Br	H	OH
NH <sub>2</sub>	O	H	H	H	OH	Br	H
NH <sub>2</sub>	O	H	H	H	OH	H	H
NH <sub>2</sub>	O	H	H	Cl	H	H	OH
NH <sub>2</sub>	O	F	H	OH	H	H	OH
NH <sub>2</sub>	O	F	H	H	OH	H	OH
NH <sub>2</sub>	O	F	H	H	OH	H	H
NH <sub>2</sub>	O	F	H	H	OH	Cl	H
NH <sub>2</sub>	O	F	H	H	OH	Br	H
NH <sub>2</sub>	O	F	H	H	Cl	H	OH
NH <sub>2</sub>	O	Br	H	H	OH	Cl	H

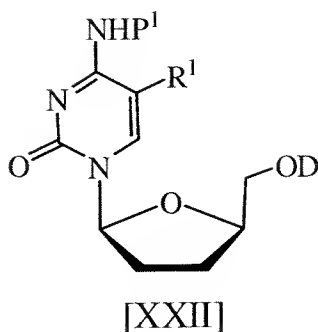
X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
NH <sub>2</sub>	O	Br	H	H	OH	H	OH
NH <sub>2</sub>	O	Br	H	OH	H	H	OH
NH <sub>2</sub>	O	I	H	H	OH	Br	H
NH <sub>2</sub>	O	I	H	H	Cl	H	OH
NH <sub>2</sub>	O	I	H	Br	H	H	OH
NH <sub>2</sub>	O	OH	H	OH	H	H	OH
NH <sub>2</sub>	O	NH <sub>2</sub>	H	H	OH	H	OH
NH <sub>2</sub>	O	CH <sub>3</sub>	H	H	OH	Cl	H
NH <sub>2</sub>	NH	H	H	OH	H	H	OH
NH-(2-Ph- Et)	O	H	H	OH	H	H	OH
NH-NH <sub>2</sub>	O	H	H	OH	H	H	OH
NH-NH <sub>2</sub>	O	F	H	OH	H	H	OH
NH-NH <sub>2</sub>	O	CH <sub>3</sub>	H	H	OH	H	OH
NH-OH	O	H	H	H	OH	H	OH
NH-OH	O	F	H	H	OH	H	OH
NH-OH	O	Br	H	H	OH	H	OH
NH-OH	O	I	H	H	OH	H	OH
NH-OH	O	H	H	OH	H	H	OH
OH	O	OH	H	OH	H	H	OH
OH	O	NH <sub>2</sub>	H	H	OH	H	OH

X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
OH	O	F	H	OH	H	H	OH
OH	O	F	H	H	OH	H	OH
OH	O	F	H	H	H	H	OH
S-CH <sub>3</sub>	O	H	H	H	F	H	OH
SH	O	H	H	H	OH	H	OH
SH	O	F	H	H	OH	H	OH
NH-(2-Ph- Et)	O	H	H	H	OH	H	OH
OH	O	OH	H	H	OH	H	OH
OH	O	H	H	H	OH	H	H

or its  $\beta$ -L-enantiomer or a pharmaceutically acceptable salt thereof.

3-34. Canceled.

35. (Previously presented): A method for the treatment of a host having a *Flaviviridae*, *Orthomyxoviridae* or *Paramyxoviridae* viral infection or abnormal cellular proliferation comprising administering to a host in need thereof an effective amount of a compound of formula (XXII):



or its  $\beta$ -D enantiomer or a pharmaceutically acceptable salt thereof, wherein:

each D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid;

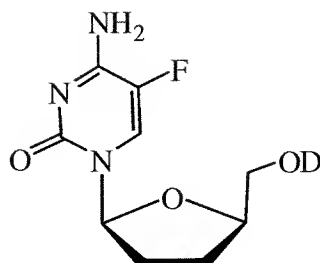
each P<sup>1</sup> is hydrogen, lower alkyl, lower alkenyl, aryl, arylalkyl, OH, OR<sup>4</sup>, NH<sub>2</sub>, NHR<sup>4</sup> or NR<sup>4</sup>R<sup>4'</sup>;

each R<sup>1</sup> is hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, alkylaryl, F, Cl, Br, I, NH<sub>2</sub>, NHR<sup>5</sup>, NR<sup>5</sup>R<sup>5'</sup>, NHOR<sup>5</sup>, NR<sup>5</sup>NHR<sup>5'</sup>, NR<sup>5</sup>NR<sup>5'</sup>R<sup>5''</sup>, OH, OR<sup>5</sup>, SH, SR<sup>5</sup>, NO<sub>2</sub>, NO, CH<sub>2</sub>OH, CH<sub>2</sub>OR<sup>5</sup>, CO<sub>2</sub>H, CO<sub>2</sub>R<sup>5</sup>, CONH<sub>2</sub>, CONHR<sup>5</sup>, CONR<sup>5</sup>R<sup>5'</sup> or CN; and

each R<sup>4</sup>, R<sup>4'</sup>, R<sup>5</sup>, R<sup>5'</sup> and R<sup>5''</sup> independently is hydrogen, lower alkyl, lower alkenyl, aryl or arylalkyl;

provided that when the host has an HCV infection and D and P<sup>1</sup> are hydrogen, R<sup>1</sup> is not hydrogen.

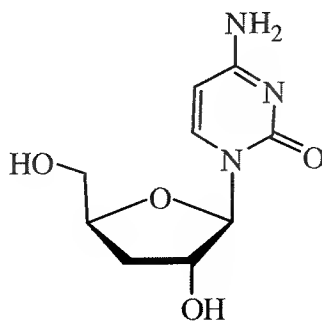
36. (Previously presented): A method for the treatment of a host having a *Flaviviridae*, *Orthomyxoviridae* or *Paramyxoviridae* viral infection or abnormal cellular proliferation comprising administering to a host in need thereof an effective amount of a compound of formula:



or its  $\beta$ -D enantiomer or a pharmaceutically acceptable salt thereof, wherein:  
each D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate,  
monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino  
acid.

37-38. Canceled.

39. (Previously presented): A method for the treatment of a host having a  
*Orthornyxoviridae* or *Paramyxoviridae* viral infection comprising administering to a host  
in need thereof an effective amount of a compound of formula:



or a pharmaceutically acceptable salt thereof.

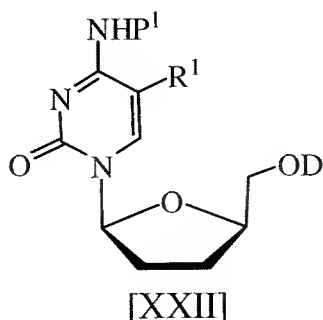
40-43. (Canceled)

44. (Currently amended): A method for the treatment of a hepatitis C virus  
infection in a host comprising administering to a host in need thereof an effective  
amount of a compound according to claim 60. ~~any one of claims 60-62, 64, and 65.~~

45-49. Canceled.



50. (Previously presented): A method for the treatment of a hepatitis C virus infection in a host comprising administering to a host in need thereof an effective amount of a  $\beta$ -L nucleoside of formula (XXII):



or its  $\beta$ -D enantiomer or a pharmaceutically acceptable salt thereof, wherein:

each D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid;

each P<sup>1</sup> is hydrogen, lower alkyl, lower alkenyl, aryl, arylalkyl, OH, OR<sup>4</sup>, NH<sub>2</sub>, NHR<sup>4</sup> or NR<sup>4</sup>R<sup>4'</sup>;

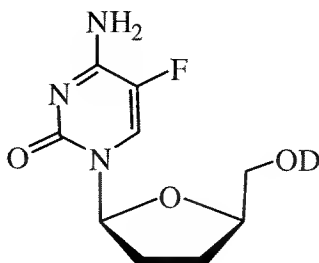
each R<sup>1</sup> is hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, alkylaryl, F, Cl, Br, I, NH<sub>2</sub>, NHR<sup>5</sup>, NR<sup>5</sup>R<sup>5'</sup>, NHOR<sup>5</sup>, NR<sup>5</sup>NHR<sup>5'</sup>, NR<sup>5</sup>NR<sup>5'</sup>R<sup>5''</sup>, OH, OR<sup>5</sup>, SH, SR<sup>5</sup>, NO<sub>2</sub>, NO, CH<sub>2</sub>OH, CH<sub>2</sub>OR<sup>5</sup>, CO<sub>2</sub>H, CO<sub>2</sub>R<sup>5</sup>, CONH<sub>2</sub>, CONHR<sup>5</sup>, CONR<sup>5</sup>R<sup>5'</sup> or CN; and

each R<sup>4</sup>, R<sup>4'</sup>, R<sup>5</sup>, R<sup>5'</sup> and R<sup>5''</sup> independently is hydrogen, lower alkyl, lower alkenyl, aryl or arylalkyl;

optionally in a pharmaceutically acceptable carrier;

provided that when D and P<sup>1</sup> are hydrogen, R<sup>1</sup> is not hydrogen.

51. (Previously presented): A method for the treatment of a hepatitis C virus infection in a host comprising administering to a host in need thereof an effective amount of a  $\beta$ -L nucleoside of formula:

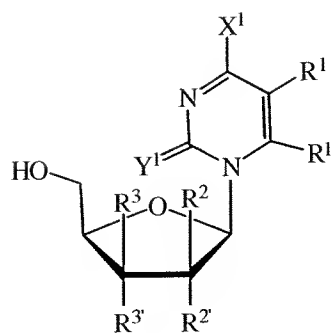


or its  $\beta$ -D enantiomer or a pharmaceutically acceptable salt thereof, wherein:  
each D is hydrogen, alkyl, acyl, monophosphate, diphosphate, triphosphate, monophosphate ester, diphosphate ester, triphosphate ester, phospholipid or amino acid;  
optionally in a pharmaceutically acceptable carrier.

52-58. Canceled.

59. (Currently amended): The method according to claims 1, 35, or 50, wherein at least one of each  $R^4$ ,  $R^{4'}$ ,  $R^{4''}$ ,  $R^5$ ,  $R^{5'}$  and  $R^{5''}$  independently is unsubstituted or substituted phenyl or benzyl.

60. (Currently amended): A method for the treatment of a host having a *Flaviviridae* viral infection comprising administering to a host in need thereof an effective amount of a compound of formula [I-a]:



[I-a]

wherein the  $\beta$ -D nucleoside of formula (I-a) is selected from one of the following:

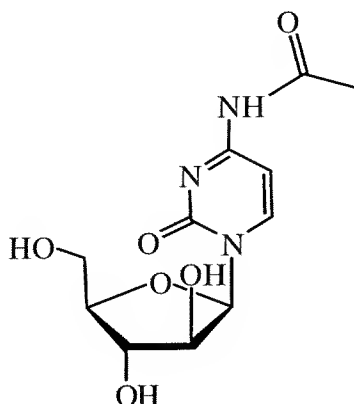
X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
NH <sub>2</sub>	O	H	H	OH	H	H	I
NH <sub>2</sub>	O	H	H	OH	H	H	Cl
NH <sub>2</sub>	O	H	H	OH	H	H	Br
NH <sub>2</sub>	O	H	H	H	OH	Br	H
NH <sub>2</sub>	Θ	H	H	H	OH	H	H
NH <sub>2</sub>	O	F	H	H	OH	H	H
NH <sub>2</sub>	O	F	H	H	OH	Cl	H
NH <sub>2</sub>	O	F	H	H	OH	Br	H
NH <sub>2</sub>	O	Br	H	H	OH	Cl	H
NH <sub>2</sub>	O	I	H	H	OH	Br	H
NH <sub>2</sub>	O	CH <sub>3</sub>	H	H	OH	Cl	H
NH-(2-Ph-Et)	O	H	H	OH	H	H	OH
NH-NH <sub>2</sub>	O	H	H	OH	H	H	OH
NH-NH <sub>2</sub>	O	F	H	OH	H	H	OH

X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
NH-NH <sub>2</sub>	Θ	CH <sub>3</sub>	H	H	OH	H	OH
NH-OH	Θ	H	H	H	OH	H	OH
NH-OH	Θ	F	H	H	OH	H	OH
NH-OH	Θ	Br	H	H	OH	H	OH
NH-OH	Θ	I	H	H	OH	H	OH
NH-OH	O	H	H	OH	H	H	OH
S-CH <sub>3</sub>	O	H	H	H	F	H	OH
NH-(2-Ph-Et)	Θ	H	H	H	OH	H	OH
OH	O	H	H	H	OH	H	H

or its β-L-enantiomer or a pharmaceutically acceptable salt thereof.

61-65. Canceled.

66. (Currently amended): A method for the treatment or prophylaxis of a host exhibiting a *Flaviviridae*, *Orthomyxoviridae* or *Paramyxoviridae* viral infection comprising administering to a host in need thereof an effective amount of a compound of the formula:



or its  $\beta$ -L enantiomer or a pharmaceutically acceptable salt thereof.

67. (Previously presented): The method of claim 1, wherein the  $\beta$ -D nucleoside of formula (I-a) is selected from one of the following:

D	X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
H	NH <sub>2</sub>	O	H	H	OH	H	H	OH
H	NH <sub>2</sub>	O	H	H	OH	H	H	I
H	NH <sub>2</sub>	O	H	H	OH	H	H	Cl
H	NH <sub>2</sub>	O	H	H	OH	H	H	Br
H	NH <sub>2</sub>	O	H	H	H	Cl	H	OH
H	NH <sub>2</sub>	O	H	H	H	Br	H	OH
H	NH <sub>2</sub>	O	H	H	H	OH	Br	H
H	NH <sub>2</sub>	O	H	H	H	OH	H	H
H	NH <sub>2</sub>	O	H	H	Cl	H	H	OH
H	NH <sub>2</sub>	O	F	H	OH	H	H	OH
H	NH <sub>2</sub>	O	F	H	H	OH	H	OH
H	NH <sub>2</sub>	O	F	H	H	OH	H	H
H	NH <sub>2</sub>	O	F	H	H	OH	Cl	H
H	NH <sub>2</sub>	O	F	H	H	OH	Br	H
H	NH <sub>2</sub>	O	F	H	H	Cl	H	OH
H	NH <sub>2</sub>	O	Br	H	H	OH	Cl	H
H	NH <sub>2</sub>	O	Br	H	H	OH	H	OH
H	NH <sub>2</sub>	O	Br	H	OH	H	H	OH

D	X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
H	NH <sub>2</sub>	O	I	H	H	OH	Br	H
H	NH <sub>2</sub>	O	I	H	H	Cl	H	OH
H	NH <sub>2</sub>	O	I	H	Br	H	H	OH
H	NH <sub>2</sub>	O	OH	H	OH	H	H	OH
H	NH <sub>2</sub>	O	NH <sub>2</sub>	H	H	OH	H	OH
H	NH <sub>2</sub>	O	CH <sub>3</sub>	H	H	OH	Cl	H
H	NH <sub>2</sub>	NH	H	H	OH	H	H	OH
H	NH-(2-Ph- Et)	O	H	H	OH	H	H	OH
H	NH-NH <sub>2</sub>	O	H	H	OH	H	H	OH
H	NH-NH <sub>2</sub>	O	F	H	OH	H	H	OH
H	NH-NH <sub>2</sub>	O	CH <sub>3</sub>	H	H	OH	H	OH
H	NH-OH	O	H	H	H	OH	H	OH
H	NH-OH	O	F	H	H	OH	H	OH
H	NH-OH	O	Br	H	H	OH	H	OH
H	NH-OH	O	I	H	H	OH	H	OH
H	NH-OH	O	H	H	OH	H	H	OH
H	OH	O	OH	H	OH	H	H	OH
H	OH	O	NH <sub>2</sub>	H	H	OH	H	OH
H	OH	O	F	H	OH	H	H	OH
H	OH	O	F	H	H	OH	H	OH

D	X <sup>1</sup>	Y <sup>1</sup>	R <sup>1</sup>	R <sup>1'</sup>	R <sup>2</sup>	R <sup>2'</sup>	R <sup>3</sup>	R <sup>3'</sup>
H	OH	O	F	H	H	H	H	OH
H	S-CH <sub>3</sub>	O	H	H	H	F	H	OH
H	SH	O	H	H	H	OH	H	OH
H	SH	O	F	H	H	OH	H	OH
H	NH-(2-Ph- Et)	O	H	H	H	OH	H	OH
H	OH	O	OH	H	H	OH	H	OH
H	OH	O	H	H	H	OH	H	H

or its  $\beta$ -L-enantiomer or a pharmaceutically acceptable salt thereof.

68-70. Canceled.